MPA Overview Day 1

HANDOUT 1.1: BIODIVERSITY GLOSSARY

Biosphere the entire portion of Earth that holds life, or the sum of all the

planet's ecosystems

Biome an ecological unit even larger than an ecoregion, usually defined

> by its climactic regime and predominant vegetation. The ocean may be considered a single biome. Other examples include

rainforests, grasslands, and tundra

Ecoregion a biogeographic (dealing with the geographical distribution of

> animals and plants) unit of land and/or water that includes a range of ecosystems and is relatively large but can still be characterized

by distinct features

Species a distinctive group of interbreeding individuals that is reproductively

isolated from other such groups, and the base unit of biological

classification

Organism an individual form of life, such as a plant, animal, or bacterium

Genes located on an organism's chromosomes, one of many units of

hereditary information and made up of DNA

a community of organisms, together with their habitats, that can be **Ecosystem**

defined by certain features and characteristics, and that function as

an integrated unit

Habitat the area occupied by a particular species or group of species

Note: the terms habitat and ecosystem are often used interchangeably. A habitat is an ecosystem when all of the ecological processes needed to support the organisms that live there happen within the habitat. For instance, mangrove forests, coral reefs, and seagrass beds are each habitats but are also each ecosystems. A larger area that contains linked mangroves, reefs, and seagrass beds is also an ecosystem since there are ecological processes that happen between mangroves and reefs, between reefs and seagrass beds, and so on.

Ecological biological processes that happen on a habitat or ecosystem level, processes

for example nutrient transport, which is the movement of nutrients

from one area to another

Endemic native to or confined to a particular region

Taxonomy (and

branch of biology concerned with naming and classifying the diagram) diverse forms of life. Taxonomy changes - although the

classification of most organisms is agreed, there are some species

that are harder to classify than others, and discoveries of new

species, especially in the ocean, are still happening.

MPA Overview Day 1

The generally accepted outline of the levels of taxonomic organization is:

KINGDOM

PHYLUM

CLASS

ORDER

FAMILY

GENUS

SPECIES

There may be subphyla, subclasses, suborders, and so on.

For example, a **blacktip grouper** is the <u>common name</u> for the species *Epinephelus fasciatus*, and is classified as following:

Kingdom: Animalia (animals)
Phylum: Chordata (vertebrates)
Class: Osteichythes (bony fish)
Subclass: Actinopterygii (ray-finned)
Order: Perciformes (perch-likes)
Family: Serranidae (sea basses; groupers)
Subfamily: Epinephelinae

Genus: *Epinephelus* Species: *fasciatus*